

ANACONDA Minerals Company  
New Mexico Operations  
P.O. Box 638  
Grants, New Mexico 87020  
Telephone 505 876 2211



February 22, 1983

The Honorable Edwin Martinez  
Governor, Pueblo of Laguna  
P. O. Box 194  
Old Laguna, New Mexico 87026

Dear Governor Martinez:

Governor Early's letter dated December 3, 1982 expressed concerns of the Pueblo of Laguna regarding reclamation issues which have not been resolved through discussions of the Technical Committee.

Our Reclamation Plan was submitted to the Bureau of Land Management in March 1982. Often referred to as the Green Book Reclamation Plan, its general objectives are to return the mine lease area to a non-mineral land use, to meet basic safety standards, to protect natural resources, and where necessary, to stabilize dump slopes and pit walls against massive slope failure and uncontrolled erosion which might jeopardize the safety and well-being of people and animals within the area. This plan was the result of the combined efforts of Anaconda, numerous technical consultants, and various government agencies. It is our belief that this plan, as submitted, fully accomplishes the objectives stated above. In addition, the plan is a statement of Anaconda's commitment to do what is proper, and goes far beyond measures required by the terms of our former leases and applicable regulations.

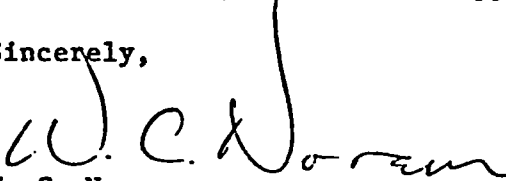
On December 10, 1982, we requested clarification of certain issues cited in Governor Early's letter. Although we have received no answer to date, we are responding to your concerns as we understand them. Our purpose is to expedite this matter.

In the attached appendix, we supply our response on each of the issues raised in Governor Early's letter. While all of the issues raised have been addressed in the Reclamation Plan, you will note that there are various issues we are willing to discuss further as potential amendments to the Plan. Any amendments agreed to in negotiations between the Pueblo and Anaconda would require BLM approval. Furthermore, Anaconda's final agreement to any amendments is contingent on unconditional acceptance of those portions of the plan unaffected by any such amendments.

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After you and your staff have had an opportunity to study the contents of this letter, we will be happy to meet with you to initiate discussions.

Sincerely,

  
W. C. Norem  
General Manager

mls

Attachment

cc: J. L. Marvin  
B. L. Odom  
C. B. Smith

*R. Janson*  
*J. Blueyer*  
*J. Bathke*

## APPENDIX

### 1. MONITORING

Anaconda has been conducting reclamation activities and monitoring of these activities at the Jackpile-Paguate Mine since 1976. The sites which have been reclaimed have experienced varied success. For all sites reclaimed, plant growth has been monitored and records of such have been maintained. Anaconda has acquired experience and a data base which is the starting point of monitoring vegetation establishment and growth activities proposed in the Reclamation Plan. The data collected on presently reclaimed areas indicate that successful plant growth conditions can be observed within 3 consecutive years of monitoring from initial seeding. If success is not attained, relative to reference areas outside the mining disturbance, reseeding or other remedial measures will be accomplished. The sites receiving "re-treatment" will be monitored until the site reaches successful plant growth conditions.

Success criteria shall be determined when the weighted average for basal cover and production on the reclaimed acreage equals or exceeds 70% of the weighted average for basal cover and production on comparable reference sites on undisturbed lands within the former lease areas.

After all such sites have been successfully revegetated, Anaconda will release the entire area to the Pueblo of Laguna and shall have no further reclamation obligation.

### 2. WASTEPILE SLOPES

The Reclamation Plan provides that all dumps yet to be reclaimed will have overall slopes between 2:1 and 3:1. The approximate dimensions and planned modifications of the dumps are portrayed in the plan by a series of cross-sections. Pit backfill slopes will not exceed 3:1, except for the west end of North Paguate Pit. Dumps will be shaped and some slopes terraced to increase stability.

Slope stabilization criteria, as defined in the Plan, are based on advice of consultants, governmental agencies and the experience of Anaconda. Some of the criteria critical to stabilization utilized in our plan are: 1) removal of excess water from dump tops to prevent piping or other massive failure modes, 2) limit the length of slopes to reduce the possibility of gully formation, 3) reduce the area included in slopes in an attempt to increase grazing potential, and 4) control the flow of water in a manner which will promote water harvest for plant utilization yet restrict the surface flow over dump crests and on dump slopes.

The Plan provides channels for the removal of precipitation from the tops of the dumps, therefore erosion on the slopes will be in direct

proportion to the precipitation falling on the slope. Obviously, the longer the slope, the more the precipitation on it. Additionally, the Plan provides for terracing on the long slopes, with drainage control on the terrace, further reducing uncontrolled runoff down the slope.

The difference in grazing potential between a 2:1 and a 3:1 slope is very little. The greater flat area resulting from the steeper slope more than makes up for any difference which might exist.

Anaconda has incorporated drop structures, terraces, and limited slope length designs to adequately control erosion. Changing any of these parameters could defeat the design. Therefore no change in the Plan is justified.

### 3. NORTH PAGUATE PIT

The Reclamation Plan provides that the pit wall will be scaled to remove loose material from the pit wall crest and provides for live-stock access to and from the pit area. The presence of the pit wall in relation to the Village of Pagate is not significantly different than the presence of other natural highwalls in the area including some that are even closer to the village. Our plan would make this pit wall safer than natural walls as 1) loose material will have been removed from the pit wall crests and 2) the pit wall will be fenced to inhibit ingress. As a result of the corrective steps to be made pursuant to our plan, the remaining pit wall will pose less of a hazard than the original highwall existing prior to mining.

In addition, Anaconda has had a study made to determine stability of the pit wall. Conclusions are that this pit wall is more stable than is required by civil engineering standards for earthen structures near large population centers.

The reclamation features to be applied to the North Pagate Pit, as described in the Reclamation Plan, include backfill of the pit to three (3) feet above the projected groundwater recovery level. Additional backfill beyond that indicated in the Plan will not enhance future grazing potential in this area. Removal of the North Pagate Pit highwall or change in the Reclamation Plan backfill criteria is not justified.

### 4. SOUTH PAGUATE PIT HIGHWALL

The Reclamation Plan provides for the South Pagate Pit area to be backfilled to an elevation which is three (3) feet above the projected groundwater recovery level. Additional backfill would not result in any increase in non-mineral use of the area that would justify the increase in cost. All dump slopes within the pit area will be sloped to 3:1 or flatter. The pit wall crests will be scaled of loose material and there will be a fence along the crest wall in the vicinity of

buildings to be left south of the pit wall. Comments made for issue #3 above, relating to Anaconda's position on the North Paguete highwall, apply here as well. Removal of the South Paguete Pit highwall or change in the Reclamation Plan backfill criteria is not justified.

#### 5. RAILROAD SPUR

The Reclamation Plan provides that the railroad will be removed and the right-of-way reclaimed. Anaconda is willing to discuss the possibility of amending the Plan to leave the railroad as is, and to transfer ownership and responsibility for cleanup to the Pueblo, subject to BLM approval.

#### 6. BUILDINGS AND EQUIPMENT

The Reclamation Plan conforms to the terms of former Leases #1 and #4 regarding buildings and equipment. Anaconda is willing to discuss leaving some of the buildings and equipment requested by the Lagunas. Any amendment of our Plan to leave additional facilities is subject to BLM approval and acceptance of the Plan.

#### 7. PAGUATE HOUSING

As confirmed in the study performed by Mr. Louis Oriard, an internationally recognized expert, Anaconda's mining operations did not cause any structural damage to the Village of Paguete. Anaconda recognizes, however, that this is a matter of concern to the residents of the Village of Paguete, and is therefore willing to discuss this matter further with Pueblo officials in connection with achieving an approved reclamation plan.

#### 8. MESITA RESERVOIR

As acknowledged, the mining activities of Anaconda had no adverse impact requiring correction on the Mesita Reservoir, and the water meets the standards for proposed usage. Therefore, no change in the Reclamation Plan is justified.

#### 9. TOPSOIL

The Reclamation Plan provides for 12 inches of topsoil on dumps to be reseeded, in addition to the four feet of overburden used to cover Jackpile-sandstone material. This topsoil cover has been shown to

be adequate to promote and sustain plant growth at the Jackpile-Paguate Mine site. Our Plan also proposes 12 inches of topsoil on the dump slopes.

Seeding procedures, which include close-spaced contour furrowing or land imprinting, will promote stability against slope erosion and other dump slope failures.

Any change in the slope configuration could impair the water control design of the Plan as previously discussed in our response to Item #2. No change in the Plan is justified.

#### 10. STABILIZATION OF ARROYO HEADCUTS

The Reclamation Plan proposes a method of armoring or rip-rapping certain head cut areas which have a potential of encroaching upon dumps. Additionally, the water runoff control features incorporated into the Plan reduce the potential of headcutting. Our Plan will meet the objective of stabilizing arroyo headcutting. No change in the Plan is justified.

#### 11. POST-RECLAMATION GRAZING MANAGEMENT

Anaconda's commitment to revegetate reclaimed areas is based upon the exclusion of grazing until the total area meets success criteria. Therefore, Anaconda is willing to discuss the possibility of erecting a livestock fence around the perimeter of the area disturbed by mining.

However, in the event any grazing occurs prior to meeting success criteria for revegetation, Anaconda's liability and responsibility for revegetation shall terminate.

#### 12. DISPOSITION OF PROTORE STOCKPILES

The Reclamation Plan utilizes the protore (sub-economic mineralized Jackpile Sandstone) as pit backfill material. Two reasons for using this material as backfill are:

- 1) As backfill material, the protore will be stabilized at a location that is relatively inaccessible to indiscriminate use.
- 2) This material will provide a significant amount of the total material needed to achieve the backfill elevations required to meet ground-water protection objectives.

At this time, approximately 7.3 million tons of protore are already in the various pits and approximately 10 million tons are located outside pit areas.

If the Pueblo decides to use this material in a uranium production project, Anaconda is willing to discuss special handling of this material providing all costs associated with such deviation from the Reclamation Plan are borne by the Pueblo of Laguna and such change is approved by the ELM.

13. LEVEL OF BACKFILL

The Plan meets the concerns of the Pueblo.